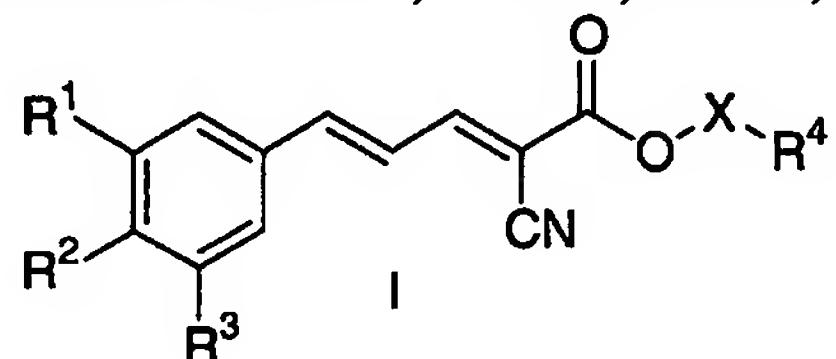


I. Amendments to the Claims

This listing of claims replaces without prejudice all prior versions, and listings, of claims in the present application.

Listing of Claims:

1. (Currently Amended) A compound of Formula I, or a salt, solvate, or hydrate thereof



wherein

R¹, R² and R³ are each independently selected from H, OH, C₁₋₆alkyl, C₁₋₆alkoxy, C₁₋₆alkylCO₂, NH₂, NH-C₁₋₆alkyl, N(C₁₋₆alkyl)(C₁₋₆alkyl), C₁₋₆alkyl(C=O)NH, C₁₋₆alkyl(C=O)N(C₁₋₆alkyl), SH, S-C₁₋₆alkyl, NO₂, CF₃, OCF₃ and halo;

R⁴ is unsubstituted ~~Ar~~ aryl, or ~~Ar~~ aryl substituted with 1-4 substituents, independently selected from C₁₋₆alkyl, C₁₋₆alkoxy, and halo;

X is selected from (CH₂CH₂O)_n and (CH₂)_n, and

n = 1-4.

2. (Currently Amended) The compound according to claim 1, wherein

R¹, R² and R³ are each independently selected from H, OH, C₁₋₄alkyl, C₁₋₄alkoxy, C₁₋₄alkylCO₂, NH₂, NH-C₁₋₄alkyl, N(C₁₋₄alkyl)(C₁₋₄alkyl), C₁₋₄alkyl(C=O)NH, C₁₋₄alkyl(C=O)N(C₁₋₄alkyl), NO₂, CF₃, OCF₃, and halo;

R⁴ is unsubstituted aryl, or aryl substituted with 1-4 substituents of C₁₋₆alkyl,

X is (CH₂CH₂O)_n, and

n = 1-4.

3. (Original) The compound according to claim 1 or 2, wherein R¹, R², and R³ are each independently selected from H, OH, C₁₋₄alkyl, C₁₋₄alkoxy, C₁₋₄alkyl(CO)O, NH₂, NH-C₁₋₄alkyl, N(C₁₋₄alkyl)(C₁₋₄alkyl), C₁₋₄alkyl(C=O)NH, C₁₋₄alkyl(C=O)N(C₁₋₄alkyl), NO₂, CF₃, OCF₃, and halo.

4. (Original) The compound according to claim 3, wherein R¹, R² and R³ are each independently selected from H, OH, OCH₃, CH₃CO₂, NH₂, N(CH₃)₂, CH₃CONH, and NO₂.

5. (Original) The compound according to claim 4, wherein R¹, R², and R³ are each independently selected from H, OH, and OCH₃.

6. (Currently Amended) The compound according to claim 1, wherein R⁴ is unsubstituted ~~Ar~~ aryl.

7. (Original) The compound according to claim 6, wherein R⁴ is phenyl.

8. (Currently Amended) The compound according to claim 2, wherein R⁴ is unsubstituted aryl, or aryl substituted with 1-4 substituents of methyl or ethyl.

9. (Currently Amended) The compound according to claim 8, wherein R⁴ is unsubstituted aryl, or aryl substituted with 1-4 substituents of methyl.

10. (Original) The compound according to claim 9, wherein n is 2-3.

11. (Original) The compound according to claim 10, wherein n is 3.

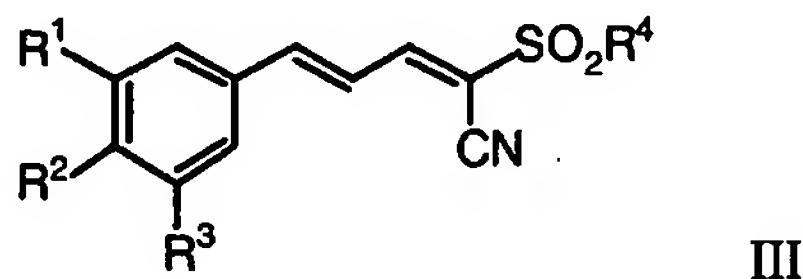
12-16. (Cancelled).

17. (Currently Amended) A method of modulating cell proliferation comprising administering an effective amount of a compound according to claim 1 or a composition according to claim 13, to a cell or animal in need thereof.

18. (Original) The method according to claim 17, for inhibiting cell proliferation.

19. (Original) The method according to claim 18 wherein the cell is a malignant hematopoietic cell.

20. (Currently Amended) A compound of Formula III, or a salt, solvate, or hydrate thereof:



wherein

R^1 , R^2 and R^3 are each independently selected from H, OH, C₁₋₆alkyl, C₁₋₆alkoxy, C₁₋₆alkylCO₂, NH₂, NH-C₁₋₆alkyl, N(C₁₋₆alkyl)(C₁₋₆alkyl), C₁₋₆alkyl(C=O)NH, C₁₋₆alkyl(C=O)N(C₁₋₆alkyl), SH, S-C₁₋₆alkyl, NO₂, CF₃, OCF₃, and halo; and

R^4 is selected from C₁₋₆alkyl, phenyl and pyridyl, wherein phenyl and pyridyl are unsubstituted or substituted with 1-4 substituents, independently selected from C₁₋₆alkyl, C₁₋₆alkoxy and halo, with the provisos that when R^1 and R^3 are both H and R^4 is unsubstituted phenyl, R^2 is not H, Cl, or OCH₃; when R^1 and R^2 are both H and R^4 is unsubstituted phenyl, R^3 is not NO₂; and when R^1 and R^3 are both H and R^4 is CH₃, R^2 is not N(CH₃)₂ and when R^4 is C₁₋₆alkyl or phenyl, R^2 is not N(C₁₋₆alkyl)(C₁₋₆alkyl).

21. (Original) The compound according to claim 1, wherein R^1 , R^2 and R^3 are each independently selected from H, OH, C₁₋₄alkyl, C₁₋₄alkoxy, C₁₋₄alkylCO₂, NH₂, NH-C₁₋₄alkyl, N(C₁₋₄alkyl)(C₁₋₄alkyl), C₁₋₄alkyl(C=O)NH, C₁₋₄alkyl(C=O)N(C₁₋₄alkyl), NO₂, CF₃, OCF₃, and halo.

22. (Currently Amended) The compound according to claim 21, wherein R¹, R² and R³ are each independently selected from H, OH, OCH₃, CH₃CO₂, NH₂, N(CH₃)₂, CH₃CONH, and NO₂.

23. (Original) The compound according to claim 20, wherein R⁴ is selected from C₁₋₄alkyl, phenyl, and pyridyl.

24. (Original) The compound according to claim 23, wherein R⁴ is selected from CH₃ and phenyl.

25. (Original) The compound according to claim 24, wherein R⁴ is unsubstituted phenyl.

26. (Original) The compound according to claim 20, wherein phenyl and pyridyl are unsubstituted or substituted with 1-3 substituents, independently selected from C₁₋₄alkyl, C₁₋₄alkoxy, and halo.

27. (Original) The compound according to claim 24, wherein phenyl is unsubstituted or substituted with 1-2 substituents, independently selected from C₁₋₄alkyl, C₁₋₄alkoxy, and halo.

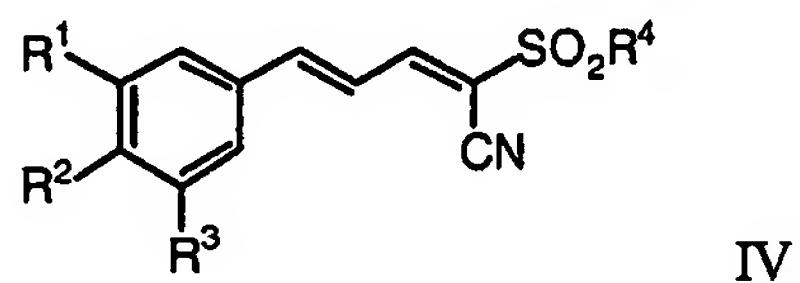
28. (Original) The compound according to claim 20, wherein at least one of R¹, R² and R³ is OH while R⁴ is selected from unsubstituted phenyl and phenyl substituted with 1-4 substituents, independently selected from C₁₋₆alkyl, C₁₋₆alkoxy, and halo.

29. (Original) A compound selected from:
2-Benzene sulfonyl-5-(3,4-dihydroxyphenyl)-penta-2E,4E-dienenitrile (CRVIII-33),
2-Benzene sulfonyl-5-(4-hydroxy-3,5-dimethoxyphenyl)-penta-2E,4E-dienenitrile (CRVIII-34),
2-Benzene sulfonyl-5-(4-nitrophenyl)-penta-2E,4E-dienenitrile (CRVIII-35),
5-(4-Acetoxy-3-methoxyphenyl)-2-benzenesulfonyl-penta-2E,4E-dienenitrile (CRVIII-49)
5-(3,4-Dihydroxyphenyl)-2-(pyridine-2-sulfonyl)-penta-2E,4E-dienenitrile (CRVIII-50),
2-(4-Chlorobenzenesulfonyl)-5-(3,4-dihydroxyphenyl)-penta-2E,4E-dienenitrile (CRVIII-51),
5-(3,4-Dihydroxyphenyl)-2-(toluene-4-sulfonyl)-penta-2E,4E-dienenitrile (CRVIII-52), and

5-(3,4-Dihydroxyphenyl)-2-methanesulfonyl-penta-2E,4E-dienenitrile (CRVIII-53).

30. (Previously Amended) A composition comprising a compound according to claim 20 in admixture with a pharmaceutically acceptable diluent or carrier.

31. (Original) A composition comprising, in admixture with a pharmaceutically acceptable diluent or carrier, a compound of Formula IV, or a salt, solvate, or hydrate thereof



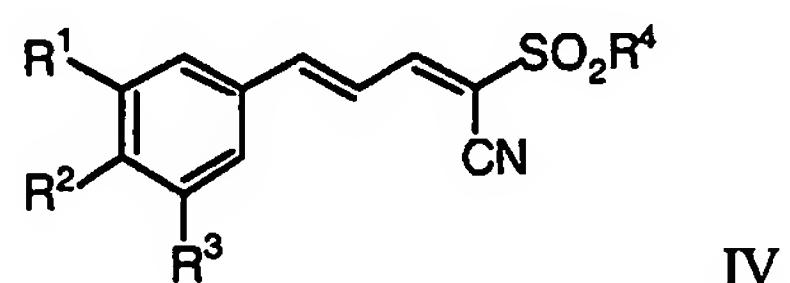
wherein

R^1 , R^2 and R^3 are each independently selected from H, OH, C_{1-6} alkyl, C_{1-6} alkoxy, C_{1-6} alkylCO₂, NH₂, NH- C_{1-6} alkyl, N(C_{1-6} alkyl)(C_{1-6} alkyl), C_{1-6} alkyl(C=O)NH, C_{1-6} alkyl(C=O)N(C_{1-6} alkyl), SH, S- C_{1-6} alkyl, NO₂, CF₃, OCF₃, and halo; and

R^4 is selected from C_{1-6} alkyl, phenyl and pyridyl, wherein phenyl and pyridyl are unsubstituted or substituted with 1-4 substituents, independently selected from C_{1-6} alkyl, C_{1-6} alkoxy, and halo.

32-34. (Cancelled).

35. (Previously Amended) A method of modulating cell proliferation comprising administering to a cell or animal in need thereof an effective amount of a composition according to claim 30 or 31, or a compound capable of modulating cell proliferation of Formula IV, or a salt, solvate or hydrate thereof:



wherein

R^1 , R^2 and R^3 are each independently selected from H, OH, C_{1-6} alkyl, C_{1-6} alkoxy, C_{1-6} alkylCO₂, NH₂, NH- C_{1-6} alkyl, N(C_{1-6} alkyl)(C_{1-6} alkyl), C_{1-6} alkyl(C=O)NH, C_{1-6} alkyl(C=O)N(C_{1-6} alkyl), SH, S- C_{1-6} alkyl, NO₂, CF₃, OCF₃, and halo; and

R^4 is selected from C_{1-6} alkyl, phenyl and pyridyl, wherein phenyl and pyridyl are unsubstituted or substituted with 1-4 substituents, independently selected from C_{1-6} alkyl, C_{1-6} alkoxy, and halo.

36. (Original) The method according to claim 35, for inhibiting cell proliferation.

37. (Original) The method according to claim 36, wherein the cell is a malignant hematopoietic cell.